Marine Aquaculture in the U.S.

Growing Our Domestic Seafood

NOAA FISHERIES

Office of Aquaculture

Our mission is to foster marine aquaculture that creates employment and business opportunities in coastal communities, provides safe and sustainable seafood, and supports healthy ocean populations and ecosystems.

Aquaculture is one of a range of technologies needed to meet increasing global demand for seafood, support commercial and recreational fisheries, and restore species and marine habitat.

What is marine aquaculture?

Marine aquaculture is the breeding, rearing and harvesting of marine plants and animals. U.S. marine aquaculture produces primarily oysters, clams, mussels, shrimp, salmon and some other marine fish. Marine aquaculture can take place in the ocean or on-land in tanks and ponds.

What can marine aquaculture do for the economy?

Marine aquaculture creates jobs, supports resilient working waterfronts and coastal communities and provides new international trade opportunities. As aquaculture has grown to complement our wild fisheries, current and former fishermen are using aquaculture to supplement and support fishing livelihoods. Farmed seafood products already make up half of the world's seafood supply, but U.S. production lags behind much of the world, leading to an $11 billion seafood trade deficit in the United States. Aquaculture currently accounts for 20% of the value of domestic fisheries landings. Doubling current production could result in tens of thousands of jobs in coastal communities.

Why is aquaculture needed to increase seafood supply?

Shellfish, finfish and seaweed farming is a steady source of safe, nutritious, sustainable seafood for consumers in the United States and worldwide. Today the United States imports over 90% of the seafood we eat by value – more than any other country. Global and domestic demand for seafood is poised to grow. Even as we maintain and rebuild our wild harvest fisheries, we cannot meet increasing domestic demand for seafood alone through wild-caught fisheries. Marine aquaculture provides a domestic source of economically and environmentally sustainable seafood that complements and supports our wild fisheries production.

Is marine aquaculture being done sustainably in the U.S.?

Yes. Over the last 30 years we have learned how to manage aquaculture sustainably. The practices and technologies available today are significantly improved over what was available during the industry's early years. NOAA, with its partners and collaborators, has developed economically and environmentally sustainable marine aquaculture practices in U.S. waters.

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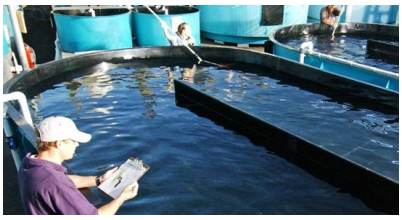
Marine Aquaculture in your region

Alaska

In 2014, the Alaska Mariculture Initiative was started to boost oyster, clam and crab production in the state. The Alaskan King Crab Research, Rehabilitation and Biology program (AKCRRAB) has been developing strategies for hatching and rearing king crab broodstock for enhancement of the king crab industry in Alaska. The AKCRRAB program, with support from NOAA and partners, recently successfully completed the first experimental release of juvenile red king crab on Kodiak Island.

Northwest

The Washington State Shellfish Initiative has been successful in bringing together government agencies, tribes, stakeholders and academic institutes under a common goal to expand native shellfish restoration, streamline aquaculture permitting and address ocean acidification. NOAA and collaborators recently opened the Kenneth K. Chew Center for Shellfish Research & Restoration in Washington to produce native Olympia oyster seed for restoration.



Southwest

NOAA and Hubbs-Seaworld researchers continue to work to develop technology for key species like California yellowtail, a staple on sushi menus. Catalina Sea Ranch is poised to begin offshore mussel farming, an operation that is the first of its kind. California has launched a State Shellfish initiative to support shellfish aquaculture and restoration. The Humboldt Bay Harbor District is designing a baywide management plan to allow for the expansion of shellfish leasing in the Bay.

Pacific Islands

Hawaii is a leading state in open ocean finfish aquaculture, and several new projects are under development. Blue Ocean Mariculture off Hawaii's big island has been raising yellowtail for nearly a decade. Additionally, efforts are underway to restore traditional Hawaiian fishponds and return them to aquaculture production.

Northeast

The U.S.'s first commercial seaweed farm, Ocean Approved, was recently started in Maine. In New Hampshire, NOAA, UNH and local commercial fishermen are working together to farm trout, seaweed, and mussels in a single operation. New England and the mid-Atlantic have rapidly growing oyster aquaculture industries; Virginia reported record oyster production in 2013. In August 2014, a mussel farm south of Cape Cod, MA became the first aquaculture facility permitted in federal waters on the East Coast.

Southeast & Gulf of Mexico

The Gulf of Mexico Fishery Management Plan for Regulating Offshore Marine Aquaculture is the first regional permitting process designed for offshore aquaculture in the United States. The plan provides a permitting process to manage the development of fish farming in the Gulf of Mexico, allowing an estimated 5 to 20 offshore aquaculture operations to be permitted over a 10-year period. Florida also boasts an expanding ornamental fish and a thriving clam aquaculture industry.

Learn more about marine aquaculture in the U.S. and your region at:
www.nmfs.noaa.gov/aquaculture/policy/marine_aquaculture_in_us.html